



# Arizona Vaccine News

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## VACCINE NEWS

### **Prevnar 13® to Replace Prevnar 7®**

- The Advisory Committee on Immunization Practices (ACIP) published recommendations for use of Prevnar 13® (PCV13), a thirteen valent pneumococcal conjugate vaccine manufactured by Pfizer (previously Wyeth) in the March 12, 2010 issue of Morbidity and Mortality Weekly Report <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5909a2.htm>  
Highlights of these recommendations are:
- PCV13 should be used in place of PCV7
- The schedule for administration of PCV13 is the same as the schedule for PCV7 for healthy children ages 2-59 months old: 2, 4, and 6 months of age with a booster at 12-15 months of age
- Children who have already received  $\geq 1$  dose of PCV7 should finish the pneumococcal vaccine series with PCV13
- Healthy children 14-59 months old who have already completed an age-appropriate series of PCV7 should receive one dose of PCV13 at least 8 weeks after the most recent PCV7 dose.
- Routine use of PCV13 is not recommended for healthy children aged  $\geq 5$  years.
- Children with underlying medical conditions that increase their risk of invasive pneumococcal disease (IPD) need to be considered for PCV13 through 71 months of age. Illnesses that put children at increased risk for IPD include sickle cell disease, human immunodeficiency virus infection, other immunocompromising conditions, chronic renal failure, cochlear implant, or cerebrospinal fluid leak.
- Children who do not receive their first dose of pneumococcal vaccine until  $\geq 24$  months of age have different recommendations for PCV13 based on whether or not they are at increased risk for IPD. Children 24-71 months of age at risk for IPD who have not previously received PCV13 vaccine need two doses of PCV13 (separated by at least 8 weeks) in contrast to healthy children 24-59 months of age who need only one dose of PCV13.
- An additional single dose of PCV13 should be given to IPD at-risk children aged 6 years-18 years who have previously received PCV7 or pneumococcal polysaccharide vaccine (PPSV23).

The Vaccine Information Statement (VIS) for PCV13 should be available soon at <http://www.cdc.gov/vaccines/pubs/vis/default.htm>

### **Vaccine for Children (VFC) Program Implications of PCV 13® Licensure**

- PCV13 is now available for ordering through the VFC program at ADHS
- VFC providers can begin using PCV13 in place of PCV7 as soon as they receive the vaccine.
- VFC providers should return all unused VFC PCV7 vaccine to ADHS by May 1, 2010.
- VFC providers do not need to wait until VFC PCV7 has expired to return it.
- Providers do not need to handle Prevnar 7® as viable vaccine because it will not be reused.
- To return PCV7 that has been obtained through the VFC program, VFC providers should complete a Return & Adjustment form as soon as

possible and fax it to the ADHS at (602) 364-3276. ADHS will return the R&A to the VFC provider within one week with the approval to return the vaccine to McKesson.

### **Rotarix® Suspension Due to an Extraneous Virus**

- FDA recommended on March 22, 2010 that clinicians in the US temporarily suspend the use of Rotarix® due to the discovery of DNA from a porcine circovirus (PCV1) in the vaccine. PCV1 has not been found to cause human disease.  
<http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm205539.htm>
- Clinicians should keep Rotarix® for possible future use pending further recommendations from the FDA. PCV1 has not been found in RotaTeq® so RotaTeq® can continue to be used for rotavirus vaccination.
- CDC has posted questions and answers about Rotarix® for parents at <http://www.cdc.gov/vaccines/vpd-vac/rotavirus/rotarix-parents.htm> and for providers at <http://www.cdc.gov/vaccines/vpd-vac/rotavirus/rotarix-providers.htm>.
- The World Health Organization advises clinicians to continue to use Rotarix® pending further investigations.  
[http://www.who.int/immunization/newsroom/news\\_rotavirus\\_vaccine\\_use/en/index.html](http://www.who.int/immunization/newsroom/news_rotavirus_vaccine_use/en/index.html)
- FDA will convene an advisory committee within 4-6 weeks to review data and make further recommendations on the licensed rotavirus vaccines.

### **VFC Program Implications of Rotarix® Suspension**

- VFC providers should keep the VFC Rotarix® vaccine they have on hand until ADHS tells them to resume using the vaccine or to return the vaccine.
- ADHS will replace any VFC provider's Rotarix® orders with RotaTeq® for the next month or two.
- ADHS's VFC supply of RotaTeq® has been put on allocation by CDC. Therefore, VFC providers may see a decrease in the amount of RotaTeq® sent to them if the CDC allocation is not sufficient to meet demand.

### **Menveo®--A New Conjugate Meningococcal Vaccine**

- Menveo® is a new quadrivalent meningococcal conjugate vaccine manufactured by Novartis that has recently been licensed by the FDA and had recommendations made by the Advisory Committee on Immunization Practices (ACIP)  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5909a5.htm>
- Menveo® is approved for persons 11-55 years of age.
- Menveo® protects against meningococcal serotypes A, C, Y and W-135.
- Menactra® (Sanofi Pasteur) is the first quadrivalent meningococcal conjugate vaccine to be licensed.  
<http://www.cdc.gov/mmwr/PDF/rr/rr5407.pdf>
- Menactra® (Sanofi Pasteur) is licensed for persons 2-55 years old and provides protection against meningococcal serotypes A, C, Y and W-135.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5648a4.htm>

### **VFC Program Implications of Menveo® Licensure**

- Menveo® can now be ordered through the ADHS VFC Program.
- VFC providers may prescribe one dose of Menveo® to VFC eligible adolescents 11-18 years of age meeting the criteria for meningococcal vaccination.
- VFC providers may prescribe one dose of Menactra® to VFC eligible patients aged 2-18 years of age meeting the criteria for meningococcal vaccination

### **ACIP Recommendations for Cervarix®--A New Human Papillomavirus (HPV) Vaccine**

- FDA has licensed a new bivalent HPV vaccine (Cervarix®; HPV2) manufactured by GlaxoSmithKline (GSK).
- The previously licensed HPV vaccine was a quadrivalent papillomavirus vaccine (HPV4, Gardasil®) manufactured by Merck.
- ACIP has revised HPV vaccine recommendations to include a variety of indications for both HPV2 and HPV4.  
<http://www.cdc.gov/vaccines/recs/provisional/downloads/hpv-vac-dec2009-508.pdf>
- Either HPV2 or HPV4 is licensed for females 9-26 years old to prevent cervical cancer.
- HPV4 is licensed for females 9-26 years old to prevent both cervical cancer *and* genital warts.
- HPV4 now has a permissive recommendation in males 9-26 years old for prevention of genital warts

### **VFC Program Implications of Cervarix® Licensure**

- VFC providers may begin ordering HPV2 through VFC for females.
- To provide cervical cancer prevention, VFC providers can order either HPV2 or HPV4 for females ages 11-18 years old.
- For the prevention of cervical cancer *and* genital warts, VFC providers can order either HPV4 for females ages 11-18 years old.
- For the prevention of genital warts in males, VFC providers can order HPV4 for males ages 11-18 years old.
- More information on the HPV VFC resolution can be found at  
<http://www.cdc.gov/vaccines/programs/vfc/downloads/resolutions/1009hpv-508.pdf>

### **Inactivated Polio Vaccine (IPV) only Available in Multi-dose Vials**

Sanofi Pasteur has discontinued manufacturing IPV vaccine in syringes until at least 2011. In the interim IPV will only be supplied in multi-dose vials.

### **Pending Availability of ProQuad®--MMR/Varicella (MMRV) Vaccine**

The MMRV vaccine (ProQuad®, Merck) is expected to be back on the market later in 2010. ADHS will inform VFC providers when they will be able to order MMR/Varicella vaccine.

### **Full Availability of VFC Haemophilus influenzae type b (Hib) Vaccine**

Hib vaccine supply in the US has improved so that Hib vaccines are no longer on CDC allocation to VFC programs. There is ample vaccine to provide the full series to all children. VFC providers may return to their normal Hib vaccine ordering practices through the ADHS VFC program. See the Hib Vaccine Catch-up Schedule at the end of this document.

## **VACCINE LITERATURE**

### **Vaccinating 3-15 Year Old Children with Influenza Vaccine Protects Unvaccinated Community Members**

In the March 10, 2010 issue of the *Journal of the American Medical Association*, Loeb et al. showed that immunizing children and adolescents in rural Hutterite communities in Western Canada with inactivated influenza vaccine significantly protected unvaccinated community members against influenza.

<http://jama.ama-assn.org/cgi/reprint/303/10/943>

### **Favorable Report on 2009 H1N1 Influenza Vaccine Safety**

- The US Department of Health and Human Service's National Vaccine Advisory Committee (NVAC) created the H1N1 Vaccine Safety Risk Assessment Working Group to conduct independent and rapid reviews of available safety monitoring data for the 2009 H1N1 influenza vaccines.
- The NVAC March 1, 2010 report gives a favorable safety evaluation for the vaccines. The full report can be found at:  
[http://www.hhs.gov/nvpo/nvac/reports/vsrawg\\_report\\_feb2010.html](http://www.hhs.gov/nvpo/nvac/reports/vsrawg_report_feb2010.html)

### **Measles Outbreak in San Diego in 2008 Fueled by Intentionally Unvaccinated Children**

- The April 2010 issue of *Pediatrics* describes a measles outbreak started by an unvaccinated 7 year old who brought measles from Switzerland
- Eight hundred and thirty-nine people were exposed resulting in 11 additional measles cases.
- All cases of measles were in unvaccinated children.
- Despite a community MMR vaccination coverage  $\geq 90\%$ , there were geographically clustered areas of schools with elevated rates of intentionally undervaccinated children.
- Schools with elevated rates were more likely to be public charter and private schools, as well as public schools in upper-socioeconomic areas.
- The net public-sector cost was \$10,376 per case.
- Forty-eight children who were too young to be vaccinated were exposed and had to be quarantined at an average family cost of \$775 per child.

<http://pediatrics.aappublications.org/cgi/content/abstract/peds.2009-1653v1>

## VACCINE PREVENTABLE DISEASE ALERTS

### **Measles Alert Issued March 30 in British Columbia (Canada)**

- Ten laboratory-confirmed and four suspect cases of measles were identified in Canada in the last two weeks of March 2010.
- None of those diagnosed with measles had received two doses of measles vaccine.
- It is suspected that at least two out-of-country visitors brought measles into Vancouver sometime in February or early March.
- Measles cases occur throughout the world and are only an airplane ride away from Arizona.

<http://www.bccdc.ca/resourcematerials/newsandalerts/healthalerts/MeaslesMarch30.htm>

### **Ongoing Mumps Outbreak in the U.S.**

There is a mumps outbreak in the northeast US, mainly in the Hassidic community. CDC is concerned that mumps could spread to other parts of the country in light of travel associated with the Passover holidays.

<http://www.cdc.gov/mumps/outbreaks.html>

#### **People are considered susceptible to mumps unless they:**

- Have received at least 1 dose of MMR vaccine on or after their first birthday, or
- Have documentation of physician-diagnosed mumps, or
- Have serologic evidence of immunity to mumps, or
- Were born before 1957.

#### **Health care workers should make sure that they are immune to mumps**

- Receive two doses of MMR vaccine. One dose of MMR vaccine is estimated to be about 80% effective in preventing mumps. A second dose of MMR vaccine brings protection close to 90%.
- Use proper infection control measures. Some cases of mumps have occurred even in people who have received two doses of MMR vaccine. Therefore, fully immunized health care workers should still use a surgical mask when getting within 3 feet of patients with suspected mumps.
- Birth before 1957 does not guarantee mumps immunity. Although people born before 1957 are usually considered immune to mumps, in outbreak settings MMR vaccination should be considered even for those born before 1957.

#### **Strategies during mumps outbreaks**

- Make sure that all patients and staff are fully vaccinated against mumps.
- The second dose of MMR vaccine can be given any time  $\geq 28$  days after the first.
- Giving MMR vaccine after mumps exposure has not been shown to prevent mumps *but* if the exposure did not result in infection the MMR vaccine will provide protection against any subsequent exposure.
- Immune globulin has not been shown to be beneficial in preventing mumps after exposure.

### Infection Control Issues with Mumps

- The incubation period for mumps is 16-18 days with a range of 12-25 days.
- Maximum contagiousness is 1-2 days before and 5 days after onset of parotid gland swelling.
- All health care workers should wear a surgical mask when within 3 feet of a patient with suspected or diagnosed mumps. Also, having the patient wear a surgical mask will decrease the risk of spread to others.

More information on mumps can be found at  
<http://www.cdc.gov/vaccines/vpd-vac/mumps/default.htm>

## **VACCINE RESOURCES**

### **17th Annual AZ Immunization Conference in Phoenix on May 18 & 19, 2010**

The Arizona Immunization Program Office is announcing its 17th Annual Arizona Immunization Conference on Tuesday and Wednesday, May 18 & 19, 2010 at the Black Canyon Conference Center, 9440 N. 25th Avenue, Phoenix, AZ 85021.

Dr. Andrew Kroger from the Centers for Disease Control will present updated immunization news, Dr. Diana Hu from the Navajo Area Indian Health Services will address Native American immunization issues, Dr. Karen Lewis from ADHS will cover the history of vaccine hesitancy over the last forty years, and Dr. Bob England from the Maricopa County Department of Public Health will discuss the Great Pandemic of 2009.

Visit the conference webpage at <http://www.azdhs.gov/phs/immun/conf.htm> for more information on the agenda, workshops, and how to register. Registration is now open. Early Bird Registration is available until May 1, 2010 for those wanting a lower price, so register now. .

### **Provider Resources for Conversations with Parents (CDC)**

The Centers for Disease Control and Prevention (CDC) has new materials to help providers discuss the importance of vaccines with parents  
<http://www.cdc.gov/vaccines/spec-grps/hcp/conversations.htm>

One new document is entitled: “If You Choose Not to Vaccinate Your Child, **Understand the Risks and Responsibilities.**” This document stresses the responsibilities of parents who choose not to vaccinate their children including always informing health care workers and community contacts that their child is not vaccinated and reminding parents of the need to make alternate babysitting plans when their child cannot attend daycare or school.  
<http://www.cdc.gov/vaccines/spec-grps/hcp/downloads/not-vacc-risks-color-office.pdf>

**Please feel free to distribute ADHS’ *Arizona Vaccine News* to any of your partners who may be interested. Past issues of *Arizona Vaccine News* can be found at <http://www.azdhs.gov/phs/immun/index.htm>**



## Simplified Hib (*Haemophilus influenzae* type b) Vaccine Catch-up Schedule

Recommended schedule for healthy children 7 months – 59 months<sup>1</sup>

Child's current age	Doses already received	When was the last Hib-containing vaccine dose received?	Need More Hib Today <sup>2,3?</sup>	Minimum Interval to Next Dose or Minimum Age
<b>7-11 Months</b>	0 DOSES	NOT RECEIVED	YES	4 WEEKS
	1 DOSES	1 <sup>st</sup> DOSE RECEIVED 2 MONTHS OR MORE AGO	YES	4 WEEKS
	2 DOSES	<b>BOTH</b> DOSE 1 and 2 WERE PEDVAXHIB	NOT TODAY	AGE 1 YEAR <sup>4</sup>
		DOSE 1 and 2 WERE <b>DIFFERENT BRANDS</b> ; for example, ONE WAS PEDVAX AND ONE WAS ACTHIB	YES <sup>5</sup>	AGE 1 YEAR <sup>4</sup>
	3 DOSES	UP-TO-DATE	NOT TODAY	AGE 1 YEAR <sup>4</sup>
<b>12-14 Months</b>	0 DOSES	NOT RECEIVED	YES	8 WEEKS
	1 DOSE	1 <sup>st</sup> DOSE RECEIVED BEFORE 12 MONTHS OF AGE	YES <sup>5</sup>	8 WEEKS
		1 <sup>st</sup> DOSE RECEIVED AT OR AFTER 12 MONTHS OF AGE	YES <sup>4</sup>	COMPLETE <sup>6</sup>
	2 DOSES	1 <sup>st</sup> DOSE BEFORE 12 MONTHS OF AGE, 2 <sup>nd</sup> DOSE GIVEN AT OR AFTER 12 MONTHS OF AGE	YES	COMPLETE <sup>6</sup>
		1 <sup>st</sup> and 2 <sup>nd</sup> DOSES GIVEN AT OR AFTER 12 MONTHS OF AGE	NO <sup>6</sup>	COMPLETE <sup>6</sup>
		2 <sup>nd</sup> DOSE GIVEN BEFORE 12 MONTHS OF AGE	YES <sup>4</sup>	COMPLETE <sup>6</sup>
	3 DOSES	3 <sup>rd</sup> DOSE RECEIVED AT OR AFTER 12 MONTHS OF AGE	NO <sup>6</sup>	COMPLETE <sup>6</sup>
		3 <sup>rd</sup> DOSE RECEIVED BEFORE 12 MONTHS OF AGE	YES <sup>4</sup>	COMPLETE <sup>6</sup>
<b>15-59 Months</b>	0 DOSES	NOT RECEIVED	YES	COMPLETE <sup>6</sup>
	1 DOSE	1 <sup>st</sup> DOSE WAS AT OR AFTER 15 MONTHS OF AGE	NO <sup>6</sup>	COMPLETE <sup>6</sup>
		1 <sup>st</sup> DOSE WAS BEFORE 15 MONTHS OF AGE	YES <sup>4</sup>	COMPLETE <sup>6</sup>
	2 DOSES	2 <sup>nd</sup> DOSE RECEIVED AT OR AFTER 15 MONTHS OF AGE	NO <sup>6</sup>	COMPLETE <sup>6</sup>
		1 <sup>st</sup> DOSE RECEIVED AT OR AFTER 12 MONTHS OF AGE	NO <sup>6</sup>	COMPLETE <sup>6</sup>
		1 <sup>st</sup> DOSE RECEIVED BEFORE 12 MONTHS OF AGE, AND 2 <sup>nd</sup> DOSE GIVEN BEFORE 15 MONTHS OF AGE	YES <sup>4</sup>	COMPLETE <sup>6</sup>
	3 DOSES	3 <sup>rd</sup> DOSE RECEIVED AT OR AFTER 12 MONTHS OF AGE	NO <sup>6</sup>	COMPLETE <sup>6</sup>
		3 <sup>rd</sup> DOSE RECEIVED BEFORE 12 MONTHS OF AGE	YES	COMPLETE <sup>6</sup>

<sup>1</sup> This schedule should only be followed for children who are healthy and do not fall into high-risk categories for Hib disease. HIGH RISK includes children who are American Indian, Alaskan Native or who have sickle cell disease, leukemia, functional or anatomic asplenia, immunosuppression from cancer chemotherapy, HIV infection, and hematopoietic stem cell transplants (HSCT).

<sup>2</sup> The Centers For Disease Control and Prevention Catch-Up Schedule is available at:

[http://www.cdc.gov/vaccines/recs/schedules/downloads/child/2010/10\\_catchup-schedule-pr.pdf](http://www.cdc.gov/vaccines/recs/schedules/downloads/child/2010/10_catchup-schedule-pr.pdf)

<sup>3</sup> Minimum spacing rules can be found at <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/A/age-interval-table.pdf>.

<sup>4</sup> If it has been at least 8 weeks since the previous Hib dose.

<sup>5</sup> If it has been at least 4 weeks since the previous Hib dose.

<sup>6</sup> Child is complete if the interval between the next to last and final dose is at least 8 weeks.

Modified from a document developed by the CDC & the Connecticut Department of Public Health

Updated 3/24/2010